

# **2001 LONG-TERM ECONOMIC AND LABOR FORCE FORECAST FOR WASHINGTON**

**APRIL 2001**

## **Contents**

---

<b>EXECUTIVE SUMMARY.....</b>	<b>1</b>
Population .....	1
Labor Force.....	2
Employment .....	2
Personal Income .....	2
<b>CHAPTER 1</b>	
<b>LONG-TERM FORECASTS OF WASHINGTON POPULATION AND NET MIGRATION.....</b>	<b>3</b>
Net Migration.....	4
Forecast of Net Migration .....	6
Natural Increase.....	8
<b>CHAPTER 2</b>	
<b>LONG-TERM FORECAST OF THE WASHINGTON LABOR FORCE .....</b>	<b>13</b>
Population Change and Labor Force Growth .....	15
Migration .....	16
Changes in Labor Force Participation .....	17
Male Labor Force Participation.....	18
Female Labor Force Participation.....	21
Forecast of Total Labor Force .....	23
The Changing Profile: Aging, Female, and Non-White Workforce .....	24
Higher Proportion of Women in the Labor Force .....	24
Aging of Labor Force.....	25
Non-White and Hispanic Workforce .....	28
<b>CHAPTER 3</b>	
<b>LONG-TERM FORECAST OF WASHINGTON WAGE AND SALARY EMPLOYMENT .....</b>	<b>31</b>
Long-Term Employment Trends.....	33
Goods-Producing Employment.....	33
Lumber and Wood Products.....	36
Paper and Allied Products .....	37
Aerospace .....	37
Other Transportation Equipment .....	38
Primary Metals .....	38
Machinery and Instruments .....	39
Food Processing .....	40

**OFFICE OF FINANCIAL MANAGEMENT**

Construction .....	41
Service-Producing Employment .....	42
Transportation, Communication, and Utilities (T.C.U.).....	42
Wholesale Trade .....	43
Retail Trade.....	43
Finance, Insurance, and Real Estate (F.I.R.E.) .....	46
Services .....	46
State and Local Government.....	48
Federal Government.....	48
Employment Diversity.....	48
CHAPTER 4	
<b>LONG-TERM FORECAST OF WASHINGTON PERSONAL INCOME .....</b>	<b>51</b>
Total Personal Income Trends .....	51
Income Growth by Component .....	53
Per Capita Income Trends .....	55
Outlook for Personal Income Growth in Washington.....	58
Per Capita Income Growth Trend.....	59
Special Analysis: Trends in Earnings .....	61
Changes in Real Average Earnings in Washington, 1979-98 .....	62
Real Average Earnings Decline in Washington, 1979-88 .....	64
Rebound in Washington Real Average Earnings, 1988-98.....	65
Some Explanations for the Earnings Changes .....	65
Appendix 4-A: Decomposition of Average Earnings .....	67

**TABLES**

Table 1-1. Components of Population Change: 1980-2020 .....	11
Table 2-1. Washington Labor Force by Age and Sex, 1990 and 2025 .....	18
Table 2-2. Elderly Labor Force Participation and Education: Washington, 1990 .....	21
Table 2-3. Washington Labor Force Change .....	24
Table 2-4. Washington Labor Force: Historical and Forecast .....	26
Table 2-5. Labor Force Composition by Race: Washington .....	28
Table 3-1. Washington Labor Force and Employment .....	32
Table 3-2. Washington Non-Agricultural Wage and Salary Employment by Industry .....	34
Table 3-3. Percent Share of Total Non-Agricultural Wage and Salary Employment by Industry .....	44
Table 4-1. Real Income Growth by Component: Washington .....	53
Table 4-2. Growth in Real Earnings by Industry: Washington .....	54
Table 4-3. Personal Income Trends: Washington and U.S. ....	60
Table 4-4. Washington Real Average Earnings: Components of Change (1979-88) .....	64
Table 4-5. Washington Real Average Earnings: Components of Change (1988-98) .....	65

**FIGURES**

Figure 1-1. Components of Population Change: Washington .....	3
Figure 1-2. Population Growth: Washington, 1970-2020 .....	4
Figure 1-3. Net Migration and Traded Sectors Employment Change .....	5
Figure 1-4. Net Migration and Population Change .....	7
Figure 1-5. Births and the Total Fertility Rate: Washington .....	8
Figure 1-6. Aging of Population: Washington .....	10
Figure 2-1. Washington Labor Force Growth .....	13
Figure 2-2. Population Estimates and Forecasts for Ages 16-24 .....	15
Figure 2-3. Population Estimates and Forecasts for Ages 25-54 .....	16
Figure 2-4a. Washington Male Labor Force Participation Rates (Age 16-64) .....	19
Figure 2-4b. Washington Male Labor Force Participation Rate (Age 65+) .....	20
Figure 2-5. Washington Female Labor Force Participation Rates .....	22
Figure 2-6. Forecast of Washington Labor Force Participation Rates by Sex .....	23
Figure 2-7. Forecast of Washington Labor Force Distribution by Sex .....	25
Figure 2-8. Age Profile of Washington Labor Force .....	27
Figure 3-1. Washington Total Non-Agricultural Wage and Salary Employment .....	31
Figure 3-2. Manufacturing Employment Trends: Washington and U.S. ....	35
Figure 3-3. Share of Total Washington Non-Agricultural Employment: Lumber and Paper Industries .....	36
Figure 3-4. Relative Growth in Construction and Total Non-Agricultural Employment .....	41
Figure 3-5. Relative Growth in Trade and Total Non-Agricultural Employment .....	45
Figure 3-6. Employment Growth: Total Non-Agriculture, Services, and Traded Services .....	47
Figure 3-7. Distribution of Washington Employment by Industry .....	50
Figure 4-1. Total Personal Income: Washington, 1970-2025 .....	52
Figure 4-2. Annual Change in Total Real Personal Income .....	52
Figure 4-3. Elderly Population and Retirement-Related Payments .....	55
Figure 4-4. Annual Changes in Real Per Capita Income .....	56
Figure 4-5. Ratio of Washington to U.S. Per Capita Income .....	58
Figure 4-6. Real Per Capita Income Growth .....	61
Figure 4-7. Real Average Earnings: Washington vs. U.S. ....	62